1. A method for improved transformation efficiency of a plant, comprising:

providing a plant cell;

pre-culturing said plant cell;

providing a feeder layer;

activating a bacteria;

contacting the cultured plant cell and bacteria in the presence of the feeder layer to cause transformation of the plant cell;

identifying a transformed plant cell; and

allowing the transformed cell to grow into a plant.

2. The method of claim 1, wherein the plant cell is a member of the family Brassicaceae.

3. The method of claim 2, wherein the plant cell is a member of the genus Brassica.

4. The method of claim 3, wherein the plant cell is a member of the species *Brassica juncea*.

5. The method of claim 1, wherein the plant cell is extracted from a seedling approximately five days old.

6. The method of claim 1, wherein the plant cell is pre-cultured on a solid pre-infection medium.

7. The method of claim 6, wherein the plant cell is pre-cultured on an agar solidified medium.

8. The method of claim 6, wherein the plant cell is pre-cultured for approximately two days.

9. The method of claim 1, wherein the plant cells are pre-cultured in liquid medium.

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10. The method of claim 1, wherein the bacteria is a member of the genus Agrobacterium.

11. The method of claim 10, wherein the bacteria is a member of the species *Agrobacterium tumefaciens.*

12. The method of claim 11, wherein the bacteria strain is LBA4404.

13. The method of claim 1, wherein the bacteria is activated by subculture on a fresh medium.

14. The method of claim 13, wherein the bacteria is activated for approximately two hours.

15. The method of claim 13, wherein the fresh medium lacks antibiotics.

16. The method of claim 1, wherein the feeder layer comprises tobacco cells.

17. The method of claim 16, wherein the tobacco cells are approximately four days old.

18. The method of claim 16, wherein the tobacco cells are approximately five days old.

19. The method of claim 1, wherein the plant cells are washed after contacting the plant cells with the bacteria.

20. The method of claim 1, wherein the plant cells are not washed after contacting the plant cells with the bacteria.

21. The method of claim 1, wherein the selecting of transformed cells uses different selection media containing different hormone combinations selected from group consisting of S-1 (0.22 mg L^{-1} thidiazuron [TDZ], and 2 mg L^{-1} 2-isopentenyladenine [2iP]), S-2 (2 mg L^{-1} TDZ + 0.1 mg L^{-1} indole-3-acetic acid [IAA]); S-3 (2 mg L^{-1} Zeatin), S-4 (2 mg L^{-1} BAP, 0.1 mg L^{-1} napthalene acetic acid [NAA]), S-5 (2 mg L^{-1} TDZ, 2 mg L^{-1} benzylaminopurine [BAP], and 0.1 mg L^{-1} NAA); and S-6 (2 mg L^{-1} TDZ and 0.1 mg L^{-1} NAA).

22. The method of claim 21, wherein the selection media is S-2 (2 mg L^{-1} TDZ + 0.1 mg L^{-1} indole-3-acetic acid [IAA]).

23. The method of any one of the prior claims, wherein the plant cell becomes transformed with a gene encoding a pharmaceutical protein.

24. The method of claim 23 wherein the plant includes edible portions.

25. The method of claim 24 wherein the pharmaceutical protein is expressed in the edible portions of the plant.

26. The method of claim 25, further comprising a step of harvesting the edible portions.

27. The method of claim 26, further comprising a step of formulating the harvested edible portions into a pharmaceutical composition.

28. The method of claim 23, further comprising a step of formulating the pharmaceutically active protein into a pharmaceutical composition.

29. The method of claim 28, wherein the step of formulating comprises isolating the pharmaceutically active protein away from plant tissue.

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30. The method of claim 23, wherein the pharmaceutically active protein activates a non-protein pharmaceutically active agent.

31. The method of claim 30, further comprising a step of formulating the non-protein pharmaceutically active agent into a pharmaceutical composition.

32. The method of claim 31, wherein the step of formulating comprises isolating the pharmaceutically active agent away from plant tissue.

33. A method of transforming *B. juncea* cells by contacting the cells with *A. tumefaciens* cells carrying nucleic acid sequences to be transferred so that at least about 35% of the *B. juncea* cells are transformed with the nucleic acid sequences.

34. The method of claim 33, wherein at least about 40% of the *B. juncea* cells are transformed with the nucleic acid sequences.

35. The method of claim 33, wherein at least about 45% of the *B. juncea* cells are transformed with the nucleic acid sequences.

36. The method of claim 33, wherein at least about 50% of the *B. juncea* cells are transformed with the nucleic acid sequences.

37. The method of claim 33, wherein at least about 55% of the *B. juncea* cells are transformed with the nucleic acid sequences.

38. The method of claim 33, wherein at least about 58% of the *B. juncea* cells are transformed with the nucleic acid sequences.

39. A method of transforming *B. juncea* cells with a desired nucleic acid sequence by contacting the cells with *A. tumefaciens* so that *B. juncea* plants transformed with the desired sequence are produced within about 3 months.

40. The method of claim 39 wherein the plants are produced within about 2 months.

41. The method of claim 39 wherein the plants are produced within about 1 month.

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